



The Ground of Every Operation

Realistic environments of Planet Earth and Beyond

Octa Models creates realistic environments of real places: the foundational ground on which any operation on Earth is planned, built and run. It models the ecological forces that weigh on every decision — the rock and soil, the water, the air and the sky — on one octagon of real ground, from 1 to 300 km across, anywhere on Earth, from the authorities' own data, in 2D and 3D. Every value names its source; where none exists, it shows a dash, not a guess. Octa Models is a fruit of Octa Intelligence, a Seed of the incubator Octa HQ.

FAST FACTS

NAME	Octa Models
TAGLINE	The Ground of Every Operation
WHAT IT IS	Realistic environments of Planet Earth and Beyond
FAMILY	A fruit of Octa Intelligence · Octa HQ, the incubator
THE PLACE	An octagon of ground, 1 to 300 km across, anywhere on Earth
OPEN TODAY	The Ecological models — Ground, Water, Air and Sky (Beta, 2026)
IN DEVELOPMENT	The Biological model of cultures: human, animal, plant, aquatic, insect, algae, fungi and bacteria
AHEAD · 2027	Corridors, connectivity and hotspots; the Economic aspect
HOW IT IS SEEN	2D map, 3D block, tables and cards; every equation in Σ Math
AERIAL PHOTOGRAPH	The country's own aerial photo on the 3D ground — 25 cm a pixel at Breda (ICGC, 2025)
3D BUILDINGS	Every building from the national cadastre, at its true height from the LiDAR — 15,998 at Breda
BRING YOUR OWN	The client's own layers by file, and live readings by API
ASK OCTA	Claude inside the model: ask about your place in plain words
HOW IT IS PAID	Modelling once, then a monthly subscription for the model and its data
SHOW PLACE	Breda–Montseny, Catalonia, Spain
SINCE	2004 — more than twenty years of work, many hands
LANGUAGE	English

BY THE NUMBERS

4	29
models open today	tabs, each one plain question
278	206
equations, each shown	published references
42	11
named data sources	links between the models, checked at every build

ACCURACY, MEASURED

0.45 m
a pixel at the closest view, from Catalonia's own LiDAR survey (ICGC, flown 2021–2023)
4.7 m
how far the free world elevation model (Copernicus, 90 m) typically sits from Breda's true ground — the model reads the national survey instead
1.0 m
how far the aerial photo sits, on average, from the LiDAR's own ground at Breda (four 2 km squares; never more than 1.6 m)
0.15°
from NASA JPL's ephemeris for the sun, on average over every daylight hour of 2024; never more than 0.22°